CLAIMS

1. Process for the purification of aliphatic diamines, characterized in that it comprises a stage of hydrogenation of the diamine in the presence of a catalyst comprising an element chosen from the group consisting of platinum, palladium, ruthenium, rhodium, iridium, nickel and cobalt.

2. Process according to Claim 1, characterized in that the catalyst of the hydrogenation is a supported catalyst, the support of the catalytic element being chosen from the group consisting of charcoals, titanium, zirconium and magnesium oxides, and alumina.

3. Process according to Claim 1 or 2, characterized in that the diamine is extracted from the medium after hydrogenation by distillation.

4. Process according to one of the preceding claims, characterized in that the hydrogenation treatment is carried out on a reaction medium resulting from the synthesis of the diamine.

5. Process according to Claim 4, characterized in that the diamine is synthesized by hydrogenation of a dinitrile compound.

6. Process according to Claim 5, characterized in that the dinitrile present in the resulting reaction medium is separated before the stage of hydrogenation of the said resulting reaction medium.

7. Process according to one of the preceding claims, characterized in that the hydrogenation of the diamine is carried out with a catalyst in the form of a stationary or fluidized bed.

8. Process according to one of Claims 1 to 6, characterized in that the hydrogenation of the diamine is carried out in the presence of a catalyst suspension.

9. Process according to one of the preceding claims, characterized in that the diamine or the reaction medium from the synthesis is fed to a distillation column and in that a portion of the liquid stream circulating in the distillation column is withdrawn from a withdrawal point situated along the distillation column and is subjected to a hydrogenation stage in the presence of a catalyst comprising an element chosen from the group consisting of platinum, palladium, ruthenium, rhodium, iridium, nickel and cobalt, the said stream withdrawn after hydrogenation being fed back to the column upstream or downstream of the withdrawal point.

10. Process according to one of the preceding claims, characterized in that the diamine is chosen from the group consisting of hexamethylenediamine and methylpentanediamine.